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Page 1

=> file reg

FILE 'REGISTRY'

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FILE 'HCAPLUS'

L1 12445 S OTSUKA ?/AU
L2 5827 S NEMOTO ?/AU
L3 7406 S OTANI ?/AU
L4 146988 S SUZUKI ?/AU
L5 79979 S YAMADA ?/AU
L6 7825 S OKUBO ?/AU
L7 1 S L1 AND L2 AND L3 AND L4 AND L5 AND L6
SEL L7 1 RN

FILE 'REGISTRY'

L8 24 S E1-E24
L9 22 S L8 AND M/ELS
L10 STR 672925-92-7
L11 26 S L10
L12 STR L10
L13 1 S L12
E 12055.19.1/RID
L14 75 S E3

FILE 'CAOLD'

L15 0 S L14

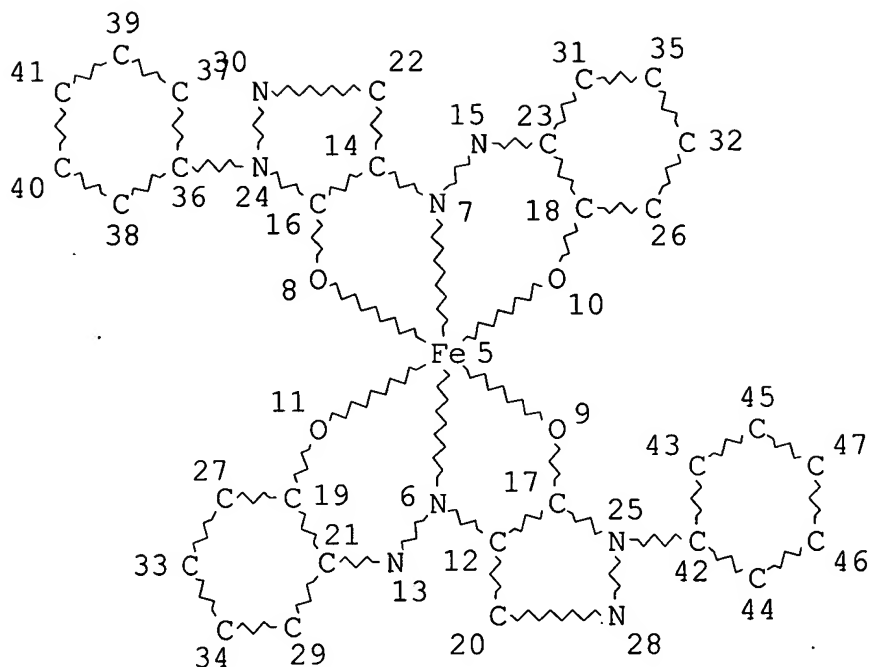
FILE 'ZCA'

L16 6 S L14

FILE 'REGISTRY'

=> d l13 que stat

L12 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 43

STEREO ATTRIBUTES: NONE

L13 1 SEA FILE=REGISTRY SSS SAM L12

100.0% PROCESSED 1 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 1 TO 80

PROJECTED ANSWERS: 1 TO 80

=> file zca

FILE 'ZCA'

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

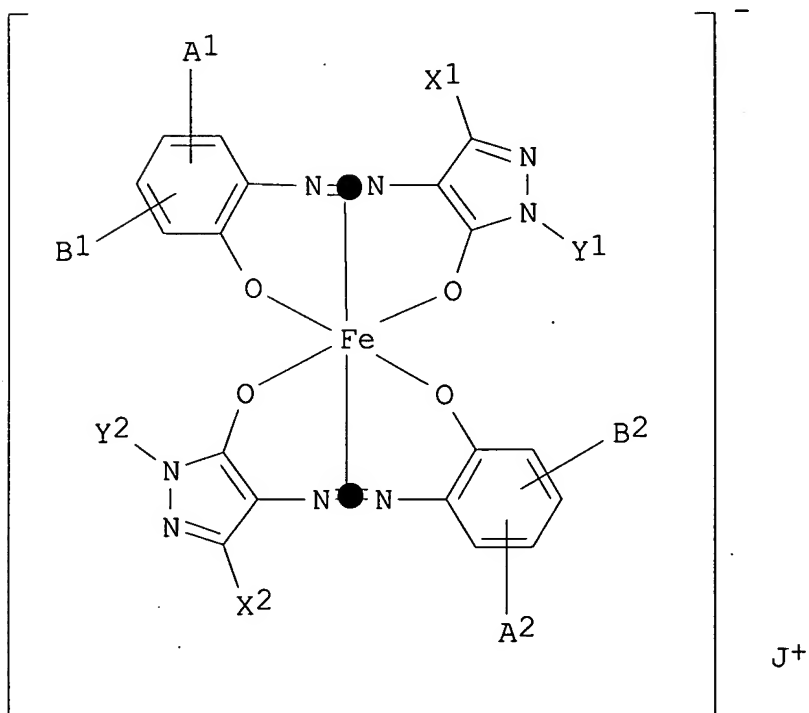
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=> d 116 1 cbib abs fhitrn hitrn

L16 ANSWER 1 OF 6 ZCA COPYRIGHT 2005 ACS on STN

140:278351 Monoazo metal complex compound for charge-controlling agent of negatively charging electrostatographic toners. Otsuka, Hideyuki; Nemoto, Kazuo; Otani, Shinji; Suzuki, Noriyuki; Yamada, Eisuke; Okubo, Masaki (Hodogaya Chemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2004086224 A2 20040318, 43 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2003-356674 20031016. PRIORITY: JP 2003-96578, 20030331; JP 2003-201262, 20030724; JP 2003-207208 20030811.

GI



Application

I

AB The title complex compd. has structure I (A1-2, B1-2 = H, alkyl,

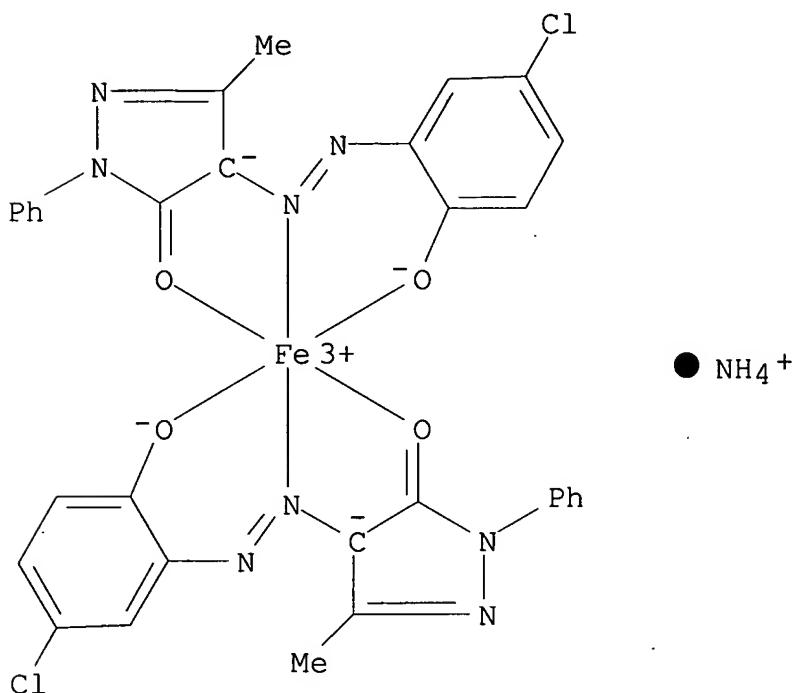
halo; j = H, alkali metal, NH₄, alkyl ammonium; X1-2 = H, alkyl, halo; Y1-2 = H, alkyl, arom. group). The compd. provides good charging effect without contg. a harmful metal and generates little explosion nor ignition.

IT **672925-71-2P**

(monoazo metal complex compd. for charge-controlling agent).

RN 672925-71-2 ZCA

CN Ferrate(1-), bis[4-[[5-chloro-2-(hydroxy-.kappa.O)phenyl]azo-.kappa.N1]-2,4-dihydro-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)-.kappa.O3]-, ammonium (9CI) (CA INDEX NAME)



IT **672925-71-2P 672925-72-3DP**, solid soln. contg.

672925-72-3P 672925-73-4DP, solid soln. contg.

672925-73-4P 672925-74-5P 672925-75-6P

672925-76-7P 672925-77-8P 672925-78-9P

672925-79-0P 672925-80-3P 672925-81-4P

672925-82-5P 672925-83-6P 672925-84-7P

672925-85-8DP, solid soln. contg. **672925-85-8P**

672925-86-9P 672925-87-0P 672925-89-2P

672925-90-5P 672925-91-6P 672925-92-7P

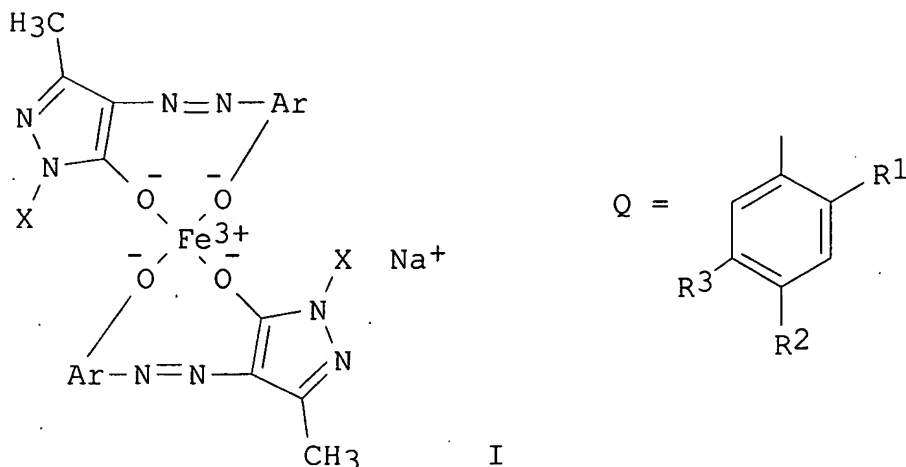
(monoazo metal complex compd. for charge-controlling agent)

=> d l16 2-6 cbib abs hitstr hitrn

L16 ANSWER 2 OF 6 ZCA COPYRIGHT 2005 ACS on STN

138:171814 Monoazo ferrous complexes of 1:2 type. Czajkowski, Wojciech; Blus, Kazimierz; Sokolowska-Gajda, Jolanta; Salagacki, Ryszard; Szymczyk, Malgorzata (Politechnika Lodzka, Pol.). Pol. PL 179186 B1 20000731, 7 pp. (Polish). CODEN: POXXA7. APPLICATION: PL 1995-308815/19950525.

GI



AB Azo ferrous complexes I (Ar = substituted o-phenylene or substituted 1,2-naphthylene, X = H, Ph, or Q, R1, R2 = H or Cl, R3 = H, Cl, Me, SO3H, or SO2NH2) are manufd. by complexing of ferrous salts with the coupling reaction products of the appropriate pyrazolone derivs. with the diazonium salts of the appropriate 2-aminophenol or 1-amino-2-naphthol derivs. A typical complex was manufd. by coupling of 3-methyl-5-pyrazolone with the diazonium salt of 2-aminophenol-4-sulfonamide, and complexing of the resulting azo dye with FeSO4.

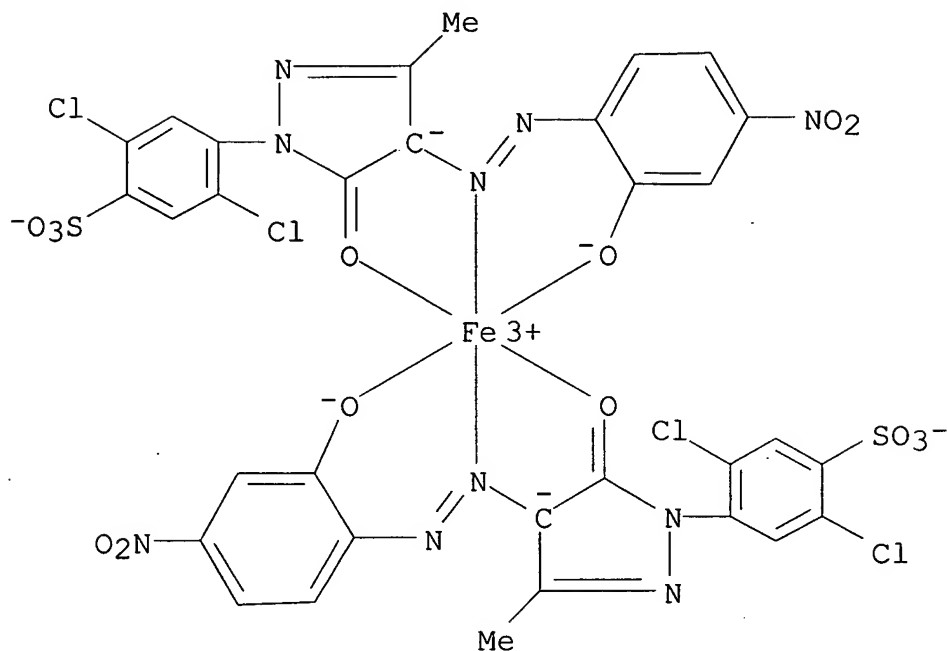
IT **497150-39-7P**

(dyes based on monoazo ferrous complexes of 1:2 type)

RN 497150-39-7 ZCA

CN Ferrate(3-), bis[2,5-dichloro-4-[4,5-dihydro-4-[[2-(hydroxy-.kappa.O)-4-nitrophenyl]azo-.kappa.N1]-3-methyl-5-(oxo-.kappa.O)-1H-pyrazol-1-yl]benzenesulfonato(3-)]-, trisodium (9CI) (CA INDEX NAME)

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PAGE 2-A

● 3 Na⁺IT **497150-39-7P**

(dyes based on monoazo ferrous complexes of 1:2 type)

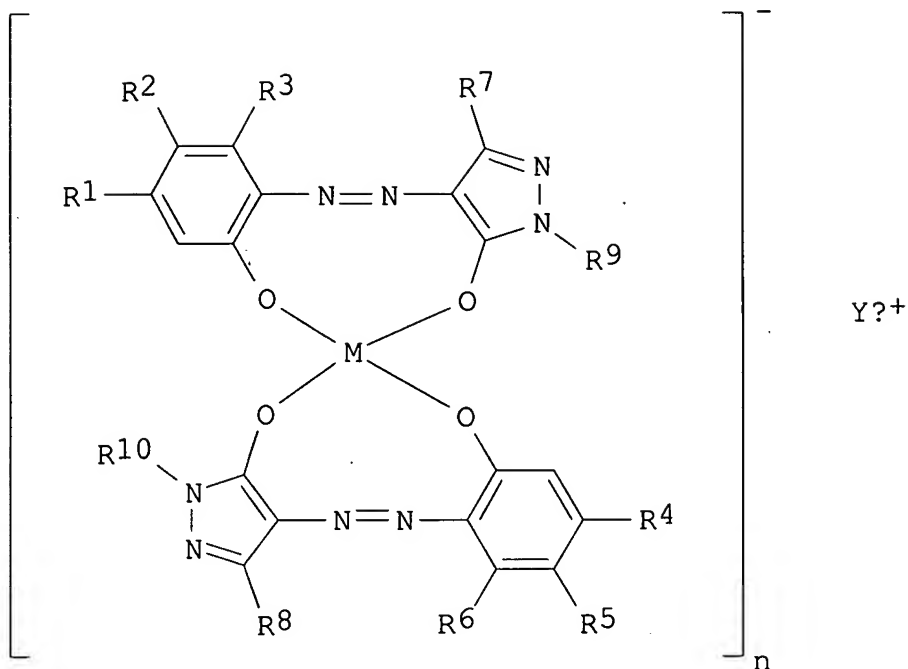
L16 ANSWER 3 OF 6 ZCA COPYRIGHT 2005 ACS on STN

137:255424 WORM (write-once read-many)-type optical recording medium for high density recording. Ueno, Yasunobu; Sato, Tsutomu; Suzuki, Nobuo (Ricoh Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2002264521 A2 20020918, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-72458/20010314.

GI

JPO, Document

JP-2001072458-#, did,



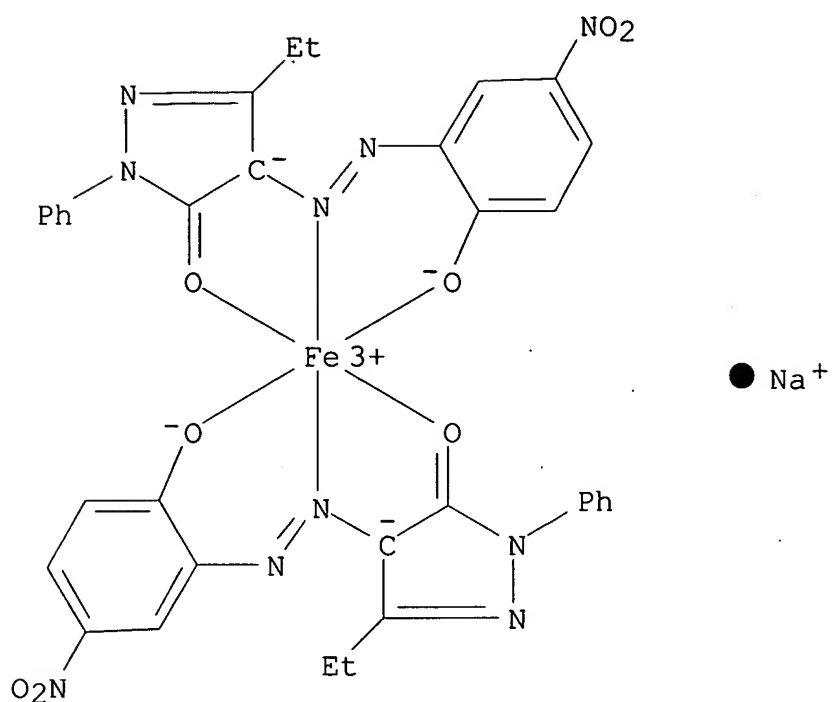
AB The optical recording medium has a recording layer contg. an azo metal chelate compd. I (R1-6 = H, halo, NO₂, SO₂NH₂, C1-5 alkyl or alkoxy; R7-8 = H, Me, Et; R9-10 = C1-5 alkyl, halo, NO₂, SO₂NH₂, C1-5 alkyl, alkoxy, (un)substituted aryl; M = divalent metal; n = 1, 2; Yn⁺ = H⁺, alkali metal ion, ammonium ion, (un)substituted aliph. ammonium ion, alicyclic ammonium ion). The recording medium, suitable for CD-R, is capable of recording with laser of wave length at .ltoreq.700 nm, and shows high light fastness and storage stability.

IT **461393-60-2 461393-69-1**

(in recording layer; WORM (write-once read-many)-type optical recording medium contg. azo metal chelate in recording layer)

RN 461393-60-2 ZCA

CN Ferrate(1-), bis[5-ethyl-2,4-dihydro-4-[[2-(hydroxy-.kappa.O)-5-nitrophenyl]azo-.kappa.N1]-2-phenyl-3H-pyrazol-3-onato(2-)-.kappa.O3]-, sodium (9CI) (CA INDEX NAME)

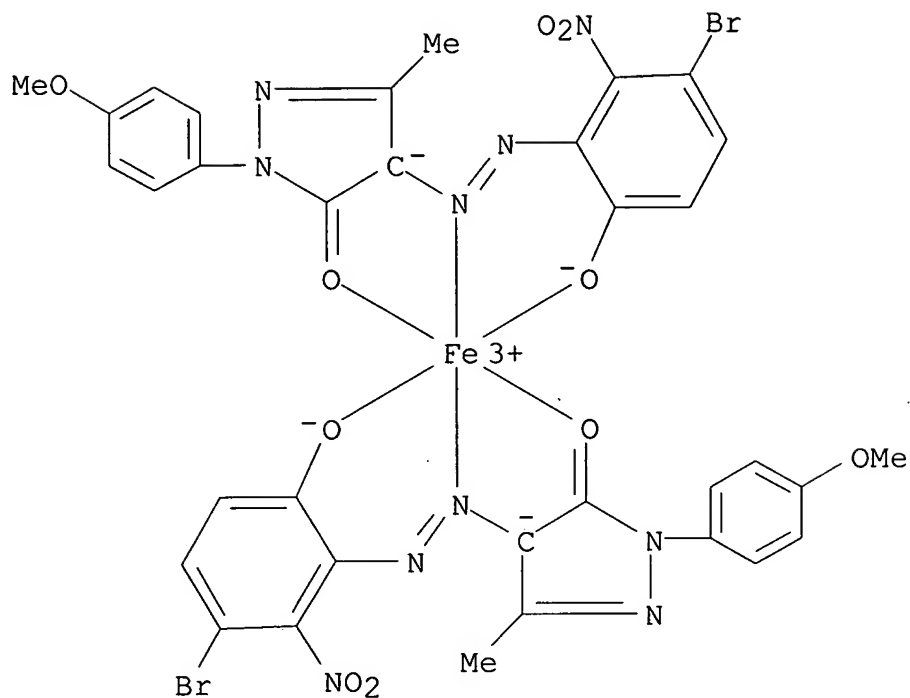


RN 461393-69-1 ZCA
 CN Ferrate(1-), bis[4-[[3-bromo-6-(hydroxy-.kappa.O)-2-nitrophenyl]azo-.kappa.N1]-2,4-dihydro-2-(4-methoxyphenyl)-5-methyl-3H-pyrazol-3-onato(2-)-.kappa.O3]-, hydrogen, compd. with 2,2'-(dodecylimino)bis[ethanol] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 461393-68-0
 CMF C34 H24 Br2 Fe N10 O10 . H
 CCI CCS

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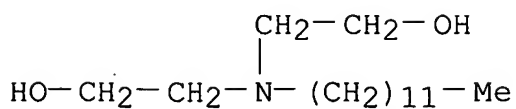
PAGE 2-A



CM 2

CRN 1541-67-9

CMF C16 H35 N O2



IT 461393-60-2 461393-69-1

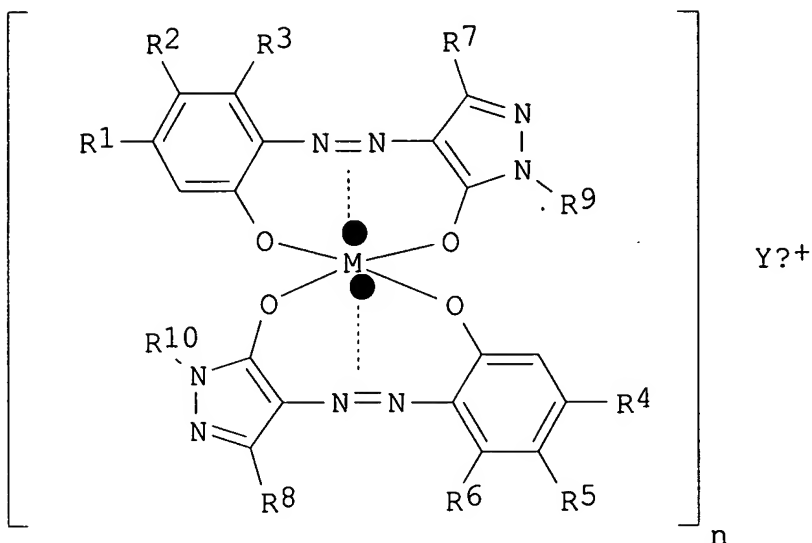
(in recording layer; WORM (write-once read-many)-type optical recording medium contg. azo metal chelate in recording layer)

L16 ANSWER 4 OF 6 ZCA COPYRIGHT 2005 ACS on STN

130:160727 Laser light-recordable optical recording medium using bisazo

dye for optical disk. Sato, Tsutomu; Ueno, Yasunari; Suzuki, Nobuo (Ricoh Co., Ltd., Japan; Hodogaya Chemical Co., Ltd.). Jpn. Kokai Tokkyo Koho JP 11020317 A2 19990126 Heisei, 13 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-193189 19970703.

GI



AB The medium has a recording layer contg. .gtoreq.1 bisazo dye I [M = trivalent transition metal; R1-6 = H, halo, NO₂, SO₂NH₂, C1-5 alkyl, alkoxy; R7, R8 = H, Me, Et; R9, R10 = C1-5 alkyl, halo, NO₂, SO₂NH₂, (C1-5 alkyl- or alkoxy-substituted) aryl; n = 1-3; Yn⁺ = H⁺, alkali metal ion, NH₄⁺, (substituted) aliph. or alicyclic ammonium ion]. The medium showed high light resistance and good storage stability.

IT **220224-95-3 220225-03-6**

(laser light-recordable optical recording medium using bisazo dye with good light resistance)

RN 220224-95-3 ZCA

CN Ferrate(1-), bis[3-[4,5-dihydro-4-[[2-(hydroxy-.kappa.O)-6-methyl-4-nitrophenyl]azo-.kappa.N1]-3-methyl-5-(oxo-.kappa.O)-1H-pyrazol-1-yl]benzenesulfonamidato(2-)]-, hydrogen, compd. with N-methyl-1-butanamine (1:1) (9CI) (CA INDEX NAME)

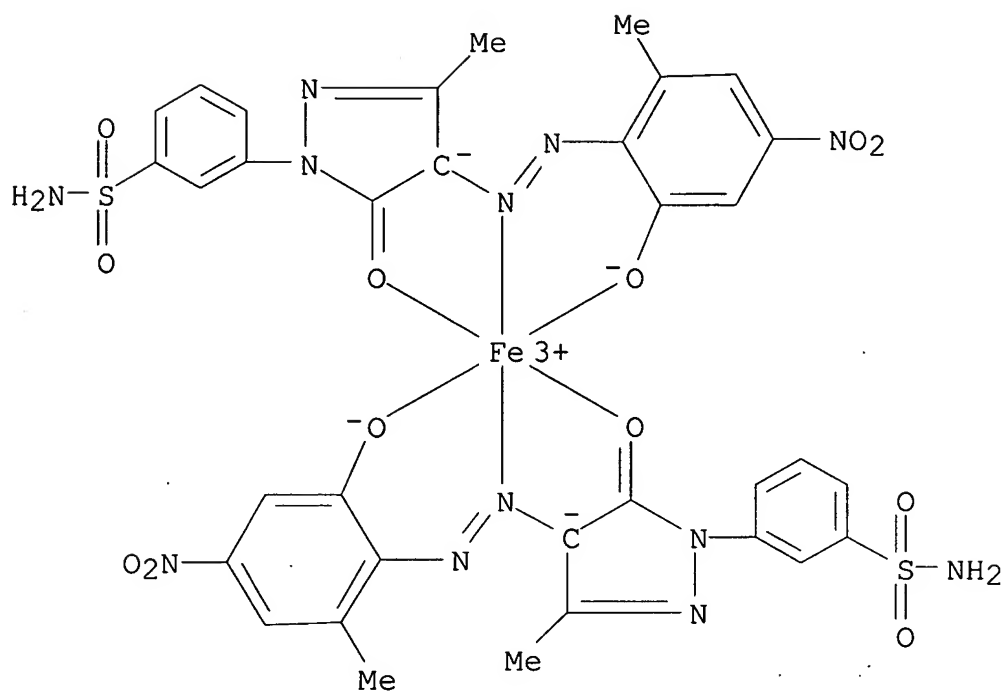
CM 1

CRN 220224-94-2

CMF C34 H28 Fe N12 O12 S2 . H

CCI CCS

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PAGE 2-A



CM 2

CRN 110-68-9

CMF C5 H13 N

n-Bu-NH-Me

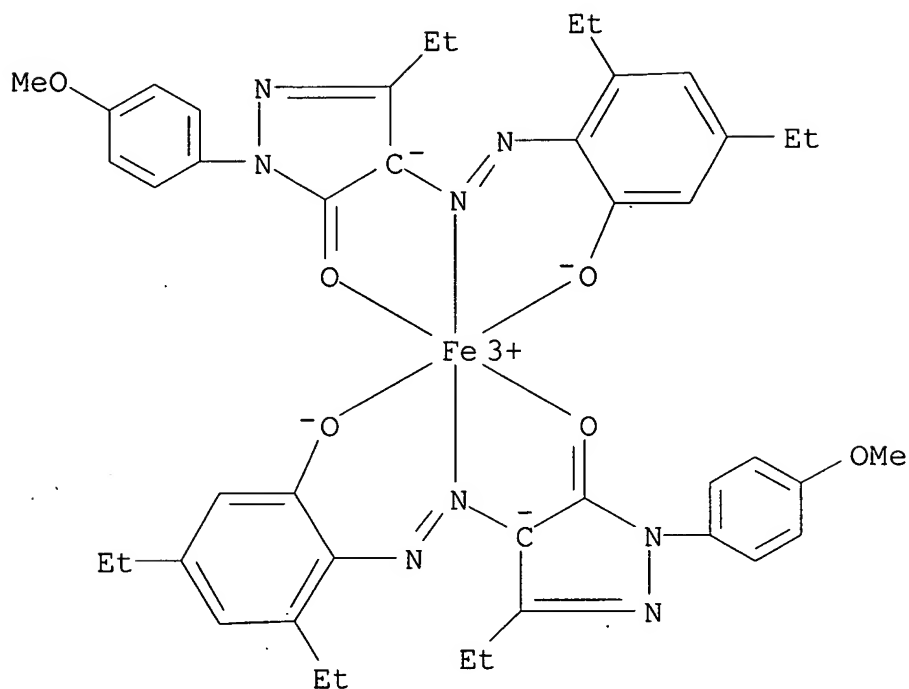
RN 220225-03-6 ZCA

CN Ferrate(1-), bis[4-[[2,4-diethyl-6-(hydroxy-κ.O)phenyl]azo-κ.N1]-5-ethyl-2,4-dihydro-2-(4-methoxyphenyl)-3H-pyrazol-3-onato(2-)-κ.O3]-, hydrogen, compd. with 2,2'-(dodecylimino)bis[ethanol] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 220225-02-5
 CMF C44 H48 Fe N8 O6 . H
 CCI CCS

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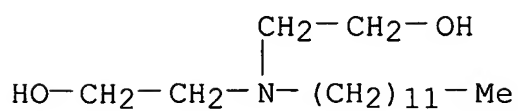


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CM 2

CRN 1541-67-9
 CMF C16 H35 N O2



IT 220224-95-3 220225-03-6

(laser light-recordable optical recording medium using bisazo dye with good light resistance)

L16 ANSWER 5 OF 6 ZCA COPYRIGHT 2005 ACS on STN

130:53642 Iron complex dyes of type 1:2 containing thiosulfate groups. Szymczyk, Malgorzata; Czajkowski, Wojciech; Stolarski, Roland (Instytut Barwnikow, Politechnika Lodzka, Lodz, Pol.). Przegląd Włokienniczy + Technik Włokienniczy (9), 26-28 (Polish) 1998. CODEN: PWTWEA. ISSN: 1230-0381. Publisher: Wydawnictwo SIGMA-NOT.

AB A series of the title dyes contg. reactive thiosulfate groups were prepd. by reacting 3-(N-2-chloroethylenesulfonamido)benzoic chloride with 1-(3-aminophenol)-3-methylpyrazol-5-one derivs. These dyes were tested on dyeing wool and polyamide fabrics. Depending on the dye structure, the exhaustion ranged from low to excellent. All dyes showed good light and laundering fastness. Overall, the dyeing results were better for polyamide fabrics than for wool fabrics.

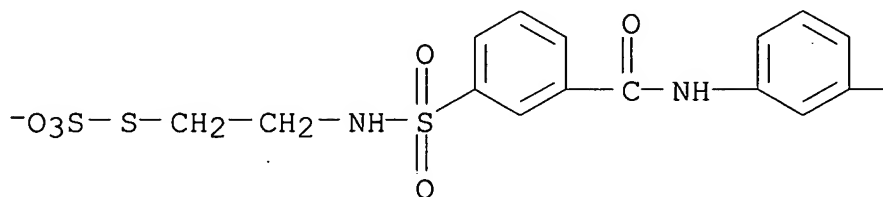
IT **217095-99-3P 217096-00-9P 217096-01-0P**
217096-02-1P 217096-07-6P

(iron complex dyes of type 1:2 contg. thiosulfate groups for dyeing of wool and polyamide fabrics)

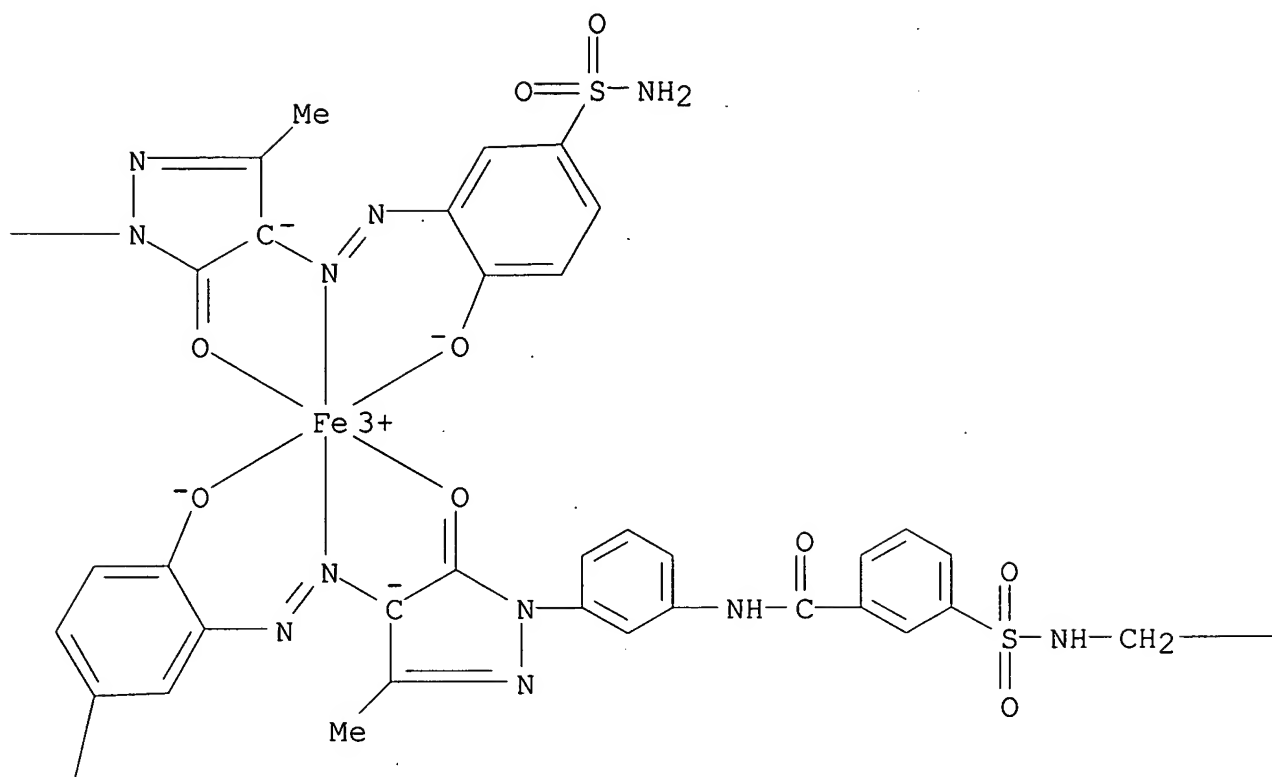
RN 217095-99-3 ZCA

CN Ferrate(3-), bis[S-[2-[[[3-[[[3-[4-[[5-(aminosulfonyl)-2-(hydroxy-.kappa.O)phenyl]azo-.kappa.N1]-4,5-dihydro-3-methyl-5-(oxo-.kappa.O)-1H-pyrazol-1-yl]phenyl]amino]carbonyl]phenyl]sulfonyl]amino]ethyl]monothiosulfato(3-)]-, trisodium (9CI) (CA INDEX NAME)

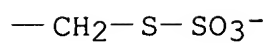
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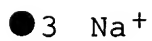
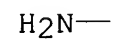
PAGE 1-B



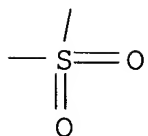
PAGE 1-C



PAGE 2-A



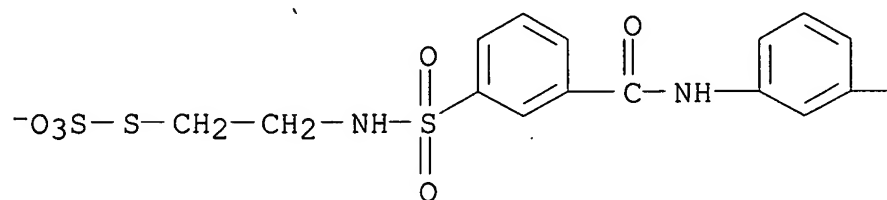
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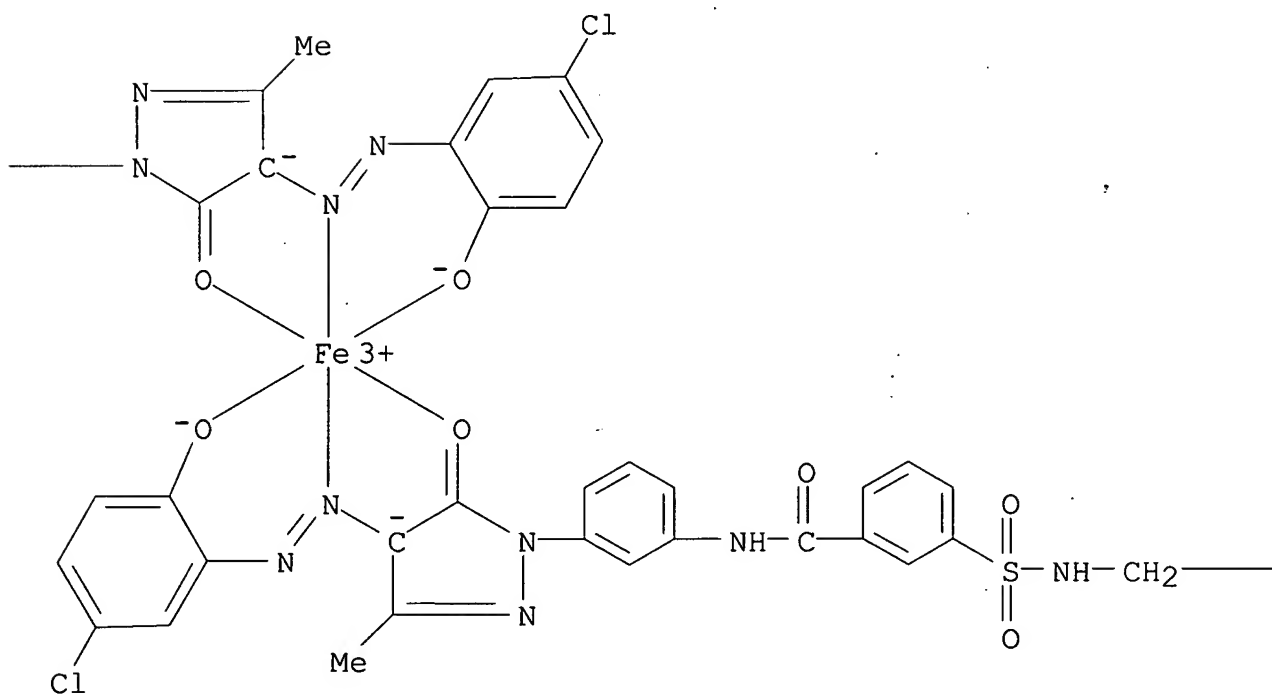
RN 217096-00-9 ZCA
CN Ferrate(3-), bis[S-[2-[[[3-[[[3-[4-[5-chloro-2-(hydroxy-

.kappa.O)phenyl]azo-.kappa.N1]-4,5-dihydro-3-methyl-5-(oxo-.kappa.O)-
 1H-pyrazol-1-yl]phenyl]amino]carbonyl]phenyl]sulfonyl]amino]ethyl]
 monothiosulfato(3-)]-, trisodium (9CI) (CA INDEX NAME)

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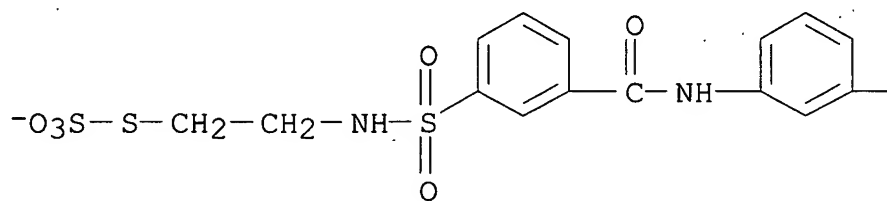
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●3 Na⁺—CH₂—S—SO₃⁻

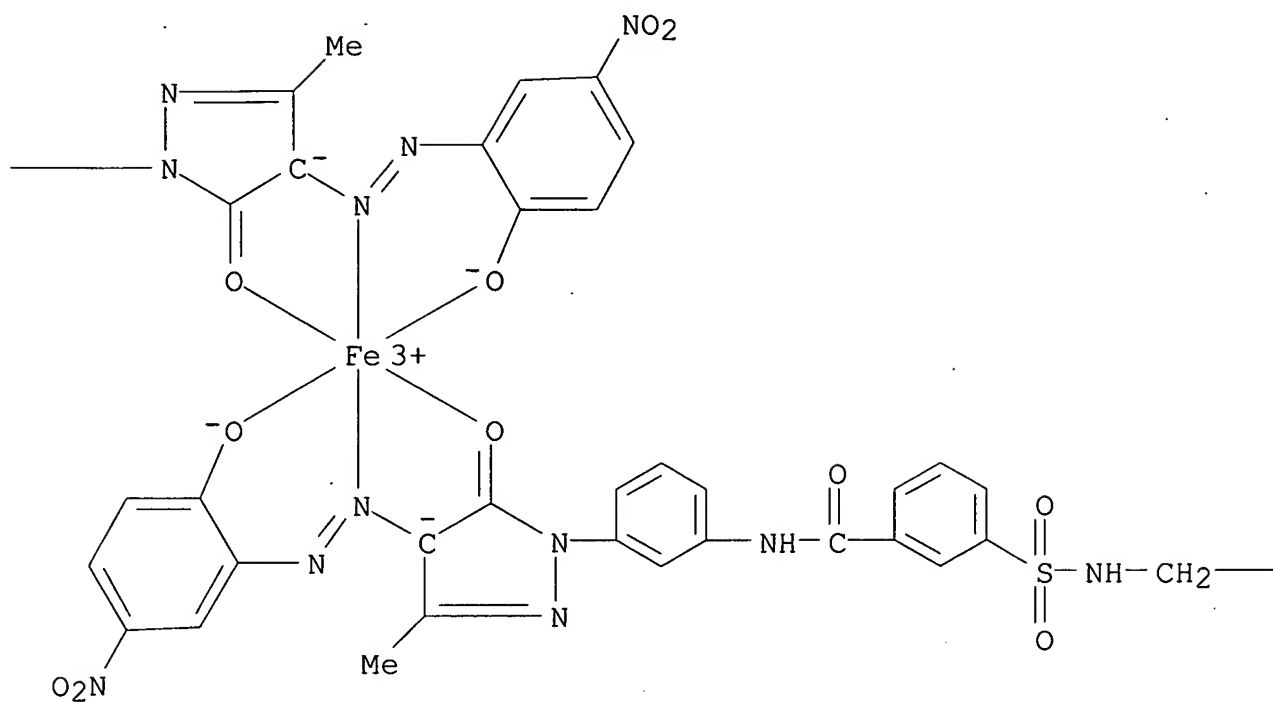
RN 217096-01-0 ZCA

CN Ferrate(3-), bis[S-[2-[[[3-[[[3-[4,5-dihydro-4-[[2-(hydroxy-.kappa.O)-5-nitrophenyl]azo-.kappa.N1]-3-methyl-5-(oxo-.kappa.O)-1H-pyrazol-1-yl]phenyl]amino]carbonyl]phenyl]sulfonyl]amino]ethyl]monothiosulfato(3-)]-, trisodium (9CI) (CA INDEX NAME)

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PAGE 1-B



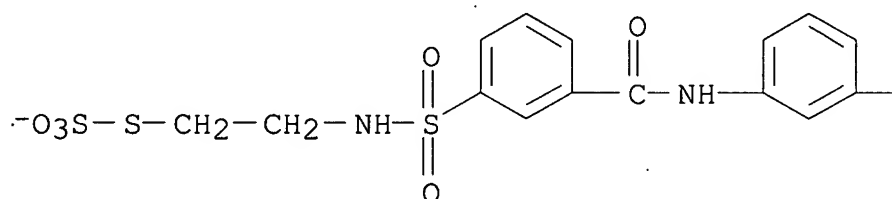
PAGE 1-C

● 3 Na^+ $\text{—CH}_2\text{—S—SO}_3^-$

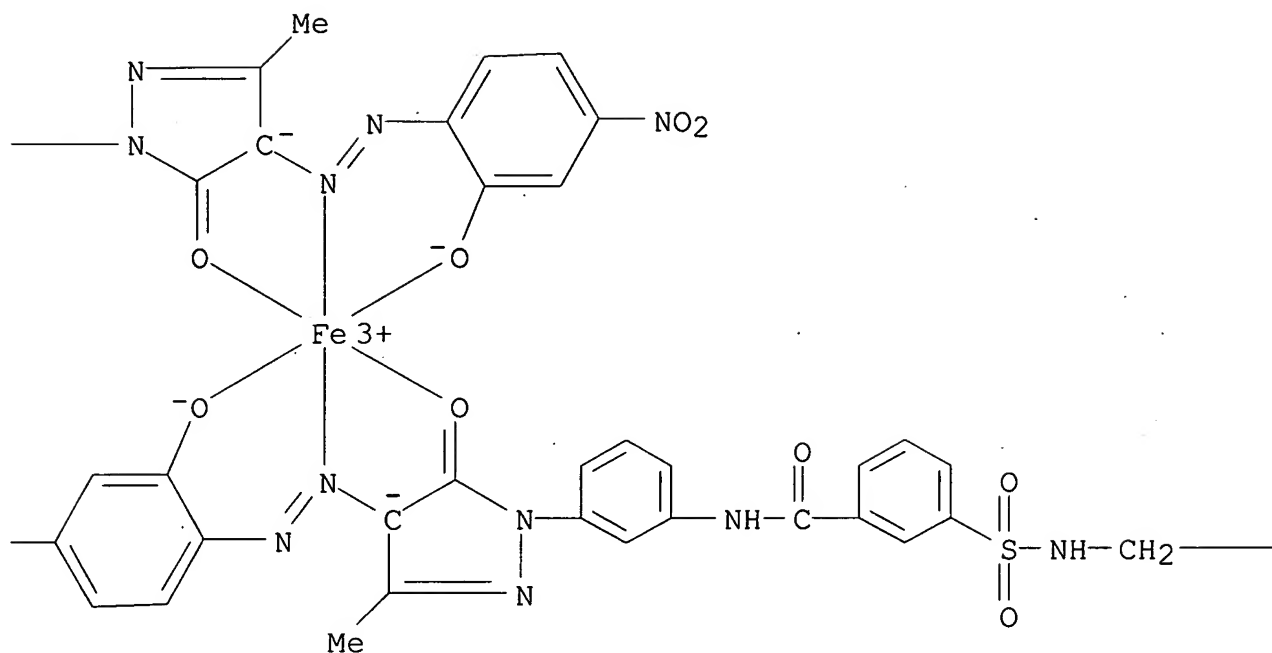
RN 217096-02-1 ZCA

CN Ferrate(3-), bis[S-[2-[[[3-[[[3-[4,5-dihydro-4-[[2-(hydroxy-
.kappa.O)-4-nitrophenyl]azo-.kappa.N1]-3-methyl-5-(oxo-.kappa.O)-1H-
pyrazol-1-yl]phenyl]amino]carbonyl]phenyl]sulfonyl]amino]ethyl]
monothiosulfato(3-)]-, trisodium (9CI) (CA INDEX NAME)

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 $\text{O}_2\text{N-}$

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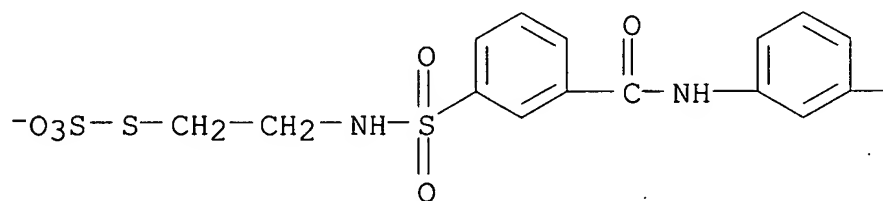
● 3 Na⁺—CH₂—S—SO₃⁻

RN 217096-07-6 ZCA

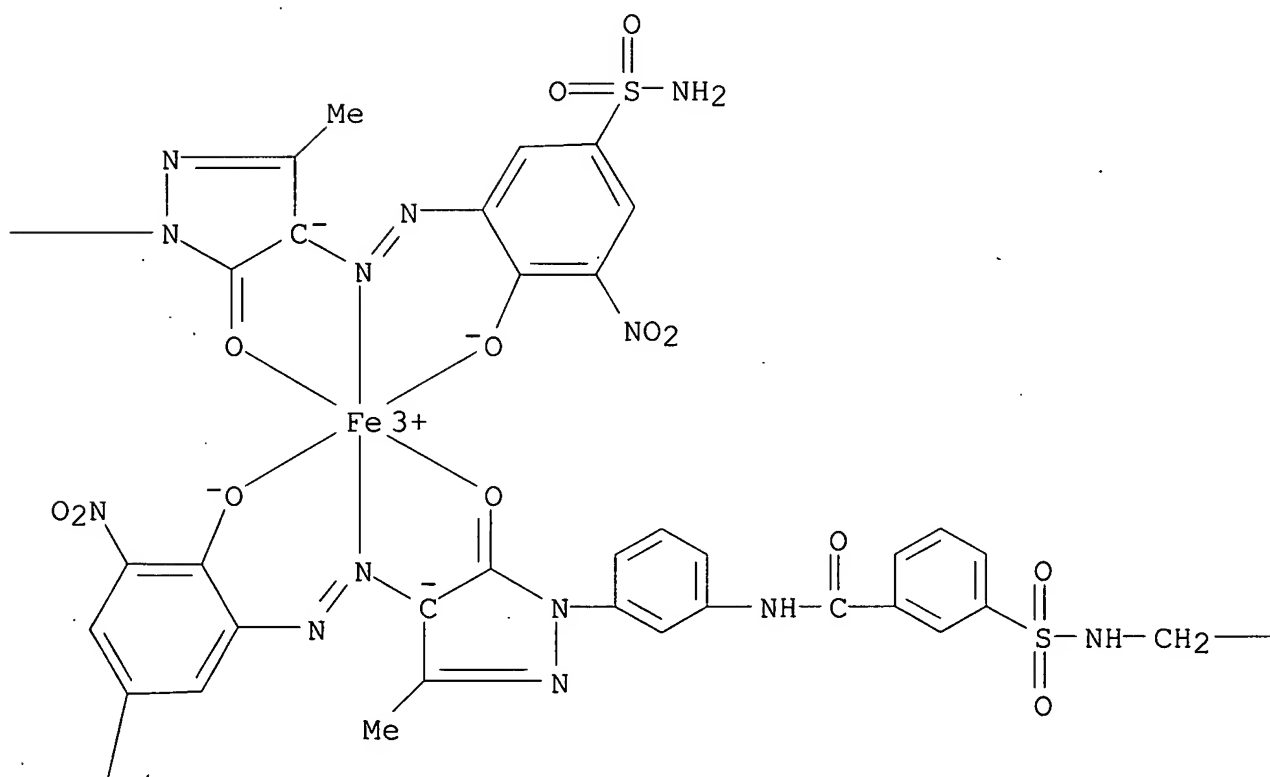
CN Ferrate(3-), bis[S-[2-[[[3-[[[3-[4-[[5-(aminosulfonyl)-2-(hydroxy-

.kappa.O)-3-nitrophenyl]azo-.kappa.N1]-4,5-dihydro-3-methyl-5-(oxo-.kappa.O)-1H-pyrazol-1-yl]phenyl]amino]carbonyl]phenyl]sulfonyl]amin
o]ethyl] monothiosulfato(3-)]-, trisodium (9CI) (CA INDEX NAME)

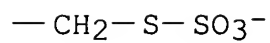
PAGE 1-A



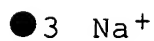
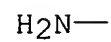
PAGE 1-B



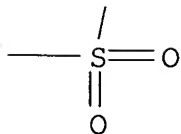
PAGE 1-C



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IT 217095-99-3P 217096-00-9P 217096-01-0P
217096-02-1P 217096-07-6P

(iron complex dyes of type 1:2 contg. thiosulfate groups for

dyeing of wool and polyamide fabrics)

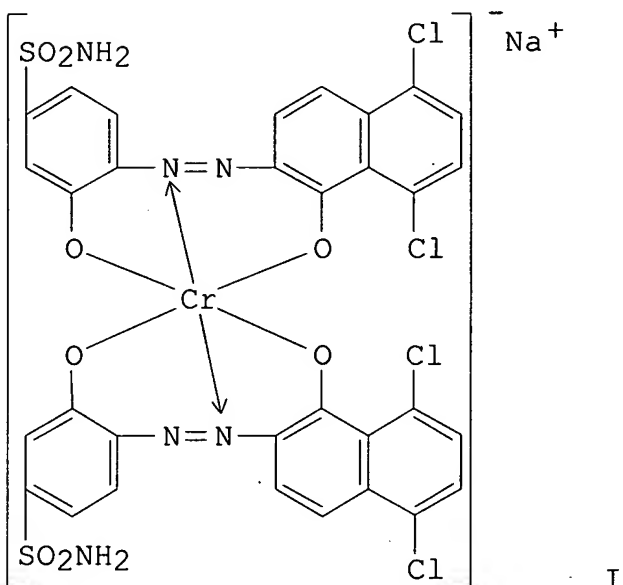
L16 ANSWER 6 OF 6 ZCA COPYRIGHT 2005 ACS on STN

108:39645 Process for the preparation of 1:2 metal complex azo dyes.

Chambon, Bernard; Jaeger, Horst Heinrich; Oxenius, ~~Ruediger~~;
Puentener, Alois (Ciba-Geigy A.-G., Switz.). (Eur. Pat. Appl. EP
241414 A2 19871014, 35 pp. DESIGNATED STATES: R: ~~BE, CH, DE, ES,~~
~~FR, GB, LI.~~ (German). CODEN: EPXXDW. APPLICATION: EP 1987-810143
19870312. PRIORITY: CH 1986-1087 19860318; CH 1986-3061 19860730.

GI

EP-241414



dye - azo

AB The title compds., dye complexes with Cr, Co, Ni, or Fe which are useful as dyes for polyamide fibers, leather, and paper and as stains for wood, are prep'd. Thus, 2-aminophenol-5-sulfonamide was diazotized and coupled with 5,8-dichloro-1-hydroxynaphthalene, and the azo dye complexed with Na chromesalicylate forming I, which dyed wool in a fast blue shade.

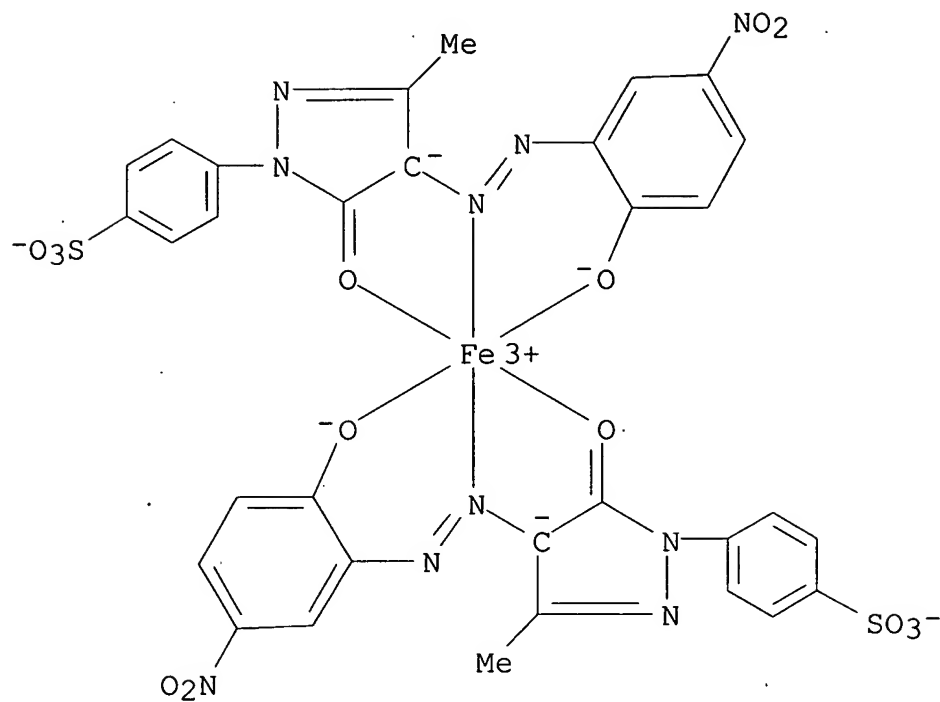
IT **72479-30-2P**

(manuf. of, as brown dye)

RN 72479-30-2 ZCA

CN Ferrate(3-), bis[4-[4,5-dihydro-4-[[2-(hydroxy-.kappa.O)-5-nitrophenyl]azo-.kappa.N1]-3-methyl-5-(oxo-.kappa.O)-1H-pyrazol-1-yl]benzenesulfonato(3-)]-, trisodium (9CI) (CA INDEX NAME)

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● 3 Na⁺

IT 72479-30-2P
(manuf. of, as brown dye)